Abstract: As a result of maritime accidents, states began to take action for some time trying to remove from its waters and ports to vessels that may be capable of harming human life and the environment through the implementation of Port State Control (PSC.) The Port State Control is the inspection of foreign ships by the port governing states in order to verify the condition of the vessel and its equipment meet the requirements of international conventions and which are managed and operated in accordance with international law force. The primary responsibility of a ship meets all the requirements imposed on their state flag, and if all flag states comply with their duties inspections by state boards of the ports would not be necessary. In Romania, ANR purpose is to reduce the number of substandard ships sailing in waters under through:

a) increasing compliance with relevant national and international legislation on maritime safety, environmental protection and working conditions and life on board, regardless of their flag;
b) establishing a common criteria for port State control of ships, harmonizing procedures on inspection and detention, taking into account its commitment made by the maritime authorities of Romania and the European Union Member States of the Paris Memorandum of Understanding on PSC.[1]

Key-words: Port State Control, Black Sea MOU, Paris MOU, ANR, inspections, risks, maritime safety, deficiencies, EMSA

1. Introduction

In July 1982, fourteen European countries signed the Paris Memorandum of Understanding on Port State Control (Paris MOU), and today many countries have signed and accepted similar MOUs around the world. Currently, nine MOUs exist in the world and their status in implementing PSC is described below.

Europe and North Atlantic region : Paris MOU (http://www.parismou.org/)
Asia-Pacific region : Tokyo MOU (http://www.tokyo-mou.org/)
Latin American region : Viña del Mar (http://www.acuerdolatino.int.ar/)
Caribbean region: Caribbean MOU (http://www.caribbeanmou.org/)
Mediterranean region: Mediterranean MOU (http://www.medmou.org/)
Indian Ocean region: Indian Ocean MOU (http://www.iomou.org/)
Black Sea region: Black Sea MOU (http://www.bsmou.org/)
West and Central Africa region: Abuja MOU
Arab States of the Gulf: Riyadh MOU.

The function of Port State Control is to ensure that shipping conforms to the regulatory requirements of internationally agreed Conventions.

Members: Belgium, Bulgaria, Canada, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Slovenia, Spain, Sweden and United Kingdom.

The Paris MOU consists of 27 participating maritime Administrations and covers the waters of the European coastal States and the North Atlantic basin from North America to European. The Paris MOU declares that their aim is to eliminate the operation of substandard ship through a harmonized system of Port State control.

PSC selected vessels based on empirically defined risks associated with owners past performance, vessel type, flag, age, classification society, etc. In the overwhelming majority of cases, targeting and inspection is professionally undertaken leading to a safer and more environmentally friendly industry.

Port State Control has been found to be a very effective tool in reducing the number of substandard ships as well as improving maritime safety and pollution prevention. In recent years, there has been a significant increase in PSC activity worldwide in concert with a number of amendments to relevant international conventions.

In order to carry out the effective implementation of PSC provisions, many countries have already signed and accepted a Memorandum of Understanding (MOU) for regional cooperation in PSC for several regions, and have established a computerized database system and/or a harmonized approach.

PSC inspection procedures have been improved to cover not only ships' hardware or documents, but also operational requirements of the relevant conventions or shipboard maintenance under the ISM Code. In the region of Black Sea it was founded in 7 of April of 2000 - Black Sea region (Black Sea MOU).

Black Sea MOU consists of 6 member Authorities: Bulgaria, Georgia, Romania, Russian Federation, Turkey, Ukraine. In Romania PSC acts through NRA – Romanian Naval Authority.

From 1 September to 30 November 2009, a Concentrated Inspection Campaign (CIC) on the Life Saving Launching Arrangements (SOLAS Ch. III) was carried out by the members of the Black Sea MOU (Bulgaria, Georgia, Romania, Russian Federation, Turkey and Ukraine). The campaign was conducted in conjunction with the Paris MOU and Tokyo MOU. The Republic of Turkey Undersecretariat for Maritime Affairs acted as the campaign coordinator.

2. The role of Romanian Naval Authority
Romanian Naval Authority's main mission is to ensure a customers satisfaction, ensuring greater safety and security in shipping, by providing better customer services as this area of activity and continuous improvement of service quality in terms of efficiency, flexibility and cost optimization.

In exercising its powers, the NRA sought to achieve the following strategic objectives:
• Providing and developing standards of safety of navigation in Romanian ports;
• Improve the system of examination and certification of seafarers Romanian;
• Provide search and rescue work, according to the SAR Convention 79 [2];
• Make checks to prevent pollution from ships;
• Monitoring ballasting, bunkering and waste teaching Constanta;
• Investigate incidents of pollution from
ships, following complaints (excluding those with criminal);• Putting on Romanian legislation to the acquis communautaire;• Real time monitoring of the acquis communautaire and adopting appropriate operational measures that are necessary, coordinate the work of its transposition into Romanian legislation;• Coordinating the Romanian legislation transposing the conventions and other regulations of interest to our country, amendments to international conventions to which Romania is party;• Identify State obligations in international agreements and conventions to which Romania is part, marine transport;• Strengthening economic and financial discipline, steady increase revenue by attracting new sources of revenue, and by judicious control of costs, including the continued reduction of debt;• Strengthen the technical and material through further policy development and upgrading of heritage institutions;• Develop communications system and the institution of international integration projects on information exchange in maritime• Motivation and involvement of all staff NRA to meet the strategic objectives of the institution;• Raising the level of expertise of staff and increase job performance NRA employees by conducting training courses;• Continuous improvement of service quality to customers, reduce bureaucracy and streamline work. If the PSCO decides to conduct a more detailed inspection is to advise the master or officer in charge, that I may contact the administration or the recognized organization that issued the relevant certificates. The main purpose of this inspection is to discover whether the ship is a real threat to maritime safety or is a possible cause of marine pollution is therefore examine the structure and equipment of the ship, Manning and crew qualifications, procedures operational discharges followed and that may or may have to make the ship.

The following vessels are identified as high-risk:
• Oil tankers over 15 years old and over 3000GT
• Gas and chemical tankers over 10 years old
• Bulk Carrier over 12 years old
• Passenger ships over 15 years old (excluding those covered by the EU Ferry Directive)

2.1.Guidelines for the control of the ship structure and equipment

The general impression about the state of the hull, main deck, ladders, handrails, pipes and the presence of corrosion affected areas will decide whether to make a detailed inspection of the ship's structure. The existence of areas damaged, corroded or perforated liner plates of the hull or deck, to be located and support efforts are vital to the seaworthiness of the vessel, may justify an arrest. When decisions are taken into account especially if it met minimum standards that set the seaworthiness of a vessel, irrespective of year of manufacture thereof. The flaws do not impede navigation, and those that are temporary and are been properly repaired to allow for arrival at a port where repairs can not be used to raise the ship's detention. The PSCO, in their assessment must take into account whether the existing damage affected the superstructure of the vessel and the habitability of the crew accommodations. Engine room: The machines and electrical installations are to provide adequate power for the propulsion system and auxiliary services of the ship. During the inspection machine, the inspector must have a general impression of its basic maintenance. Signs of poor maintenance include: disconnected or frayed cables for quick closing valves, machine control rods or disconnected or inoperative, inoperative valves, water or oil leakage, tapas double bottom and bilge dirty or corroded. The existence of numerous temporary repairs indicates reluctance to make permanent repairs. While not possible to verify the
correct operation of equipment by performance tests, the existence of general deficiencies will make way for a more detailed inspection. It will review notebook machines in search of the existence of machine failures, accidents or to check whether they have carried out periodic checks. Evidence of general deficiencies include: escapes in the stuffing of the pumps, dirty water in the water level indicators, gauges inoperative, rusty exhaust valves, elements of control systems security or disconnected or inoperative, repeated operation of the scanning system or exhaust valves carter, alarm systems and automated equipment inoperative or out of service, leaks in the lining or the outlets of the boiler. If it becomes clear that the state machinery and its maintenance is not adequate time should be conducted more detailed tests. The inspector must know how to evaluate, with its professional approach, the deficiencies found and taken into account as they interact.

Conditions of granting freeboard: If after reviewing the ship's deck have found a number of deficiencies must then proceed to review the granting of freeboard. The deficiencies include: closure systems faulty hatch covers, coaming vent pipes or corroded, also must pay particular attention to falucheras and provisions related to the tightness of the vessel.

Life saving equipment: The smooth functioning of life saving equipment depends primarily on good maintenance and use in practical exercises. The fact that much time has elapsed since the last inspection for the renewal of computer security may mean you are damaged if it has not been subjected to the usual routine maintenance. The inspector must review the existence of the minimum equipment required and their status, and also watch for signs of neglect of their lifeboats and davits. All faults are: holes in the hull, excessive accumulation of paint on cables and snatch blocks, retention axes, lack of lubrication snatch blocks, ropes or cables defective, cargo lashing deck or affecting the lifeboats or equipment. Depending on the overall impression of the maintenance of life saving equipment may proceed to a detailed inspection. This inspection would include the following: lowering the boat salvavidas, operation of liferafts, inspection of jackets and life buoys, check the expiration date of pyrotechnics, operation of alarm systems, operation of the lighting in the escape routes from the crew. This inspection is to be concentrated mainly in the essential practices for a safe withdrawal of the ship, but it could come to a full inspection, comparable to that conducted for the renewal of computer security.

Fire-fighting equipment: In the field of firefighting equipment makes a difference in the requirements for vessels in general and passenger ships. 11 lifeboats and rescue must be stowed so they are always ready for use. The minimum time to be of launching the lifeboats and liferafts is 10 minutes in the case of cargo ships and 30 minutes for the passenger. Ships in general: Poor conditions of the pipes, the mouths of fire hoses or the absence of fire extinguishers and hoses in the superstructure would mean moving to a more detailed inspection of all fire safety equipment. If the fire pump is not working properly would not be enough to classify as sub-standard ship, but would be detained until it was repaired. For a vessel to be classified as sub-standard the inspector must assess whether there is a higher fire risk than usual. Passenger ships: It is fair to suggest that the number of passenger ships which are to be classified as sub-standard will be minimal compared to cargo ships, as the former must pass annual inspections to obtain the relevant certificates. However, the inspector must decide whether it is necessary a more detailed inspection of fire protection systems. If the overall impression is negative or teams are bad references from previous inspections must be made a full inspection of fire safety plan established on board. The basic checks to be performed: state fire doors: special attention to access to engine room and kitchen, ventilation system controls and air intakes, the non-obstruction of escape routes.
and doors, safe browsing. The PSCO should also inspect the ship’s equipment that are related to prevention and communication approaches the ship, operation of lights and navigation equipment of the ship signals, operation of radio equipment, operators license and review the daily Radio-GMDSS.

3. Statistics 2009 and proposed solutions

During the CIC the Black Sea MOU Authorities carried out 1189 inspections on 1110 individual ships of which 12 (1.08%) were detained as a direct result of campaign. In total 68 (6.13%) individual ships were detained during the campaign period and the percent of the inspections with deficiencies was 67.39%

The highest number of inspections was conducted over the ships flying the flags of Turkey (12.62%), Panama (10.51%) and Malta (8.33%).

In general, 50% of all inspected ships were of general cargo/multi-purpose ship type, 22% - bulk carriers and 12% - oil tankers. Accordingly, maximum deficiency percentage recorded on ro-ro cargo ships was 85.71%, then general cargo/multi purpose ships (71.67%) and bulk carriers (62.93%).

Total detentions belonged to general cargo/multi-purpose ships with 54 (9.08%) detentions, and bulk carriers with 10 (3.86%) detentions.

The most problematic area at the ships inspected during the campaign was lack of crew familiarity with relevant IMO documentation and guidance including MSC Circulars, and lack of identification hazards associated with the launching and recovery of life boats.

The number of ships detained in 2009 for deficiencies clearly hazardous to safety, health or environmental amounted to 278. It compares with the number of detained 329 in 2008, 367 in 2007. Number of inspections decreased 356 (6.90%) total number of detentions decreased 51 (15.50%) which resulted 0.59% decrease in detention percentage in 2008 (6.37%). This high rate of decrease in detention compared with the decrease in inspections which represent 0.10 point improvement relative to the 2008.

A total of 22,885 deficiencies were recorded during port State control inspections in 2009. Majority of the deficiencies found upon inspection in 2009 were related to safety of navigation (15.63%), lifesaving appliances (13.31%), stability, structure and related equipment (12.98%), and fire safety measures (9.59%). These four categories make up 51.52% of the total deficiencies found.

Other areas where deficiencies are found are in the areas of ship and cargo operations (12.1%), working and living conditions (10.9%), stability and structure (12.4%) and certificates (11.1%). The trends in those areas are clarified below.

During 2009, the ships that entered the Romanian ports were made by PSC Romanian, an initial survey number 1163. The number of ships off the navigation is 41. All ships detained were fined, according to regulations, the amount of income from fines is bugatul locally. Also this year, inspectors have carried out and 190 reinspecŃii SGP, the role of verifying correct deficiencies listed in inspection reports.

In the Paris MOU, were conducted three inspections of Romanian vessels. There was no restraint on any vessel Port State Control under the Romanian flag. In the Black Sea MOU (BSMoU) no restraint on any vessel flying the Romanian flag.

Area captains have had an important activity in the authorization of repair, dismantling and new buildings, docking and launching appliances and checking documents vessels carrying such operations. During 2009, 1126
operations were supervised by lifting the hold/releases to water, 522 permits were issued for repairs ships, 83 new construction permits and 689 inspections were conducted and measurements in small vessels.

The 2009 analysis of EMSA shows that 626 vessels were involved in 540 accidents (sinkings, collisions, groundings, fires/explosions and other significant accidents) in and around EU waters during the year. This compares with 754 in 670 accidents in 2008, 762/715 in 2007 and 535/505 during 2006. So, it can be seen that, although 2009 saw a significant reduction from the 2008 and 2007 figures, largely due to the global economic downturn, the number of vessels involved in accidents was still 17% higher than in 2006. The EMSA sources also reported that 52 seafarers lost their lives on ships operating in and around EU waters in 2009 (compared with 82 in both 2008 and 2007 and 76 in 2006).

Types of accident 2007 2008 2009
Sinkings 11 9 3
Groundings 20 37 20
Collisions/Contacts 63 76 71
Fires/Explosions 20 13 11
Other Types 14 14 9

The Mediterranean region of the EU encompasses the coasts of Greece, Cyprus, Malta, Slovenia, Italy, southern France and eastern Spain, while the Black Sea region includes the coastlines of Romania and Bulgaria. Taken together, they are very heavily trafficked in a number of areas, with much of the through traffic going in two main directions. The largest volume of through traffic uses the main east-west lanes between the Indian and Atlantic Oceans, and passes between the Suez Canal and the Straits of Gibraltar. There is also a huge volume of through traffic using the main north-south lanes, which pass through the Aegean Sea between Greece and Turkey.

Table 1. EMSA – Types of Accidents

<table>
<thead>
<tr>
<th>Types of accident</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sinkings</td>
<td>11</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Groundings</td>
<td>20</td>
<td>37</td>
<td>20</td>
</tr>
<tr>
<td>Collisions/Contacts</td>
<td>63</td>
<td>76</td>
<td>71</td>
</tr>
<tr>
<td>Fires/Explosions</td>
<td>20</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Other Types</td>
<td>14</td>
<td>14</td>
<td>9</td>
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The requirement to move oil westwards from both the Black Sea and Gulf regions means that a significant number of tankers are also passing through. Finally, the amount of internal traffic in the region is also huge. Although the Mediterranean and Black Seas are both enclosed bodies of water, and although the sea conditions are frequently calmer than in more northerly waters, major storms and heavy seas can occur in both from time to time.

The EMSA sources reported that 114 commercial ships were involved in accidents in the Mediterranean/Black Sea region during 2009 (around 18% of the EU total), which is significantly down from 149 in 2008, and almost back to the level last seen in 2006. Once again, by far the largest accident category was collisions and contacts, which made up over 62% of the regional accident total in 2009 (significantly up from 51% in 2008). Groundings was still the second largest category, and there was a huge reduction in the number reported (down by over 45% on 2008). The situation with respect to sinkings was also greatly improved, with only 3 reported during the year (down from 9 in 2008 and 11 in 2007). The reported figures for loss of life on commercial vessels in the Mediterranean/Black Sea region in 2009 were down over 60% in comparison to 2008, and accounted for a little over 17% of the EU
total. With respect to pollution, the only significant event reported was the spill by the container ship MSC Shenzhen in Algeciras Bay, Spain, on 28 October. Only 6% (similar to 2008) of the reported accidents in the region happened in the EU part of the Black Sea off Bulgaria and Romania. It is believed that this probably relates to relatively low traffic volumes in the area, rather than to significant under-reporting. [3]

4. Conclusions
The Port State Control has been one of the most effective instruments governing states of the ports can be used at controlling whether there is compliance with the rules concerning maritime safety, pollution prevention and working conditions of crew.

The Black Sea Information System has been established in the Russian Federation, for the purpose of exchanging information on port State inspections, in order to make available to Authorities information on inspection of ships in other regional ports to assist them in their selection of foreign flag ships to be inspected and in the exercise of port State control on selected ships; and provide effective information exchange facilities regarding Port State Control in the region. In accordance with the international regulations stipulated by International Conventions in the maritime field the main responsibility for ship safe condition is addressed to the flag State – the State under which flag the ship is registered. Port State control (PSC) comes into the scene when ship-owners, classification societies and flag State administrations have failed to comply with the requirements of the international maritime conventions. Although it is well understood that the ultimate responsibility for implementing conventions is left to the flag States, port States are entitled to control foreign ships visiting their own ports to ensure that any deficiencies found are rectified before they are allowed to sail. Port State control is regarded as measures complementary to the flag State control. The rights for that control are provided by the conventions themselves. In recent years, the importance of port State control has been widely recognized and there has been important movement in various regions toward establishing a harmonized approach to the effective implementation of the control provisions. Currently the following PSC regimes are established in the world.

The 2009 Port State Control Report outlines regional PSC performance and activities during the year, as well as international perspectives on port State control, and is evidence of the member Authorities’ concerted efforts to maintain maritime safety and marine pollution prevention standards on vessels operating in the Black Sea region.

The BS MOU member Authorities will persist with their efforts to eliminate the substandard element of the shipping industry, while working with those who seek to raise ship standards, to ensure the safety of seafarers and passengers and to protect the marine environment.

Again in 2009 the Port State Control Officers in the 27 member Authorities of the PMoU continued their work to promote quality shipping and to reward responsible shipowners and operators. However, actions were taken against sub-standard ships and in some cases detentions were necessary. Unfortunately, there continues to be a number of refusal of entry or banning orders issued to ships. This will increase from January 2011 where the banning provision will be extended to include all ship types and ships flying the flag of registers on the Black and Grey list of the PMoU.

During 2009 the White List continued to grow and this is pleasing to see as it testifies to the success of the partnership between the Paris MoU, its member Authorities and the
Industry. However, there continues to be a number of registers still on the black list.

The number of deficiencies in areas such as equipment and machinery and safety and fire appliances accounted for about 47% of the total number of deficiencies.

Respectly at Romanian Naval Authority, in the last 4-5 years due to increased efficiency of controls, greatly decreased the number of naval events and pollution zero. Înainte came close in 2005, several events occurred because of lack of supervision. Moreover, the requirements of Port State Control inspections require a minimum of 25% of ships visiting our ports. We must not forget that the Black Sea are still many sub-standard vessels attempting to penetrate the EU coastline. Are old ships, which can not be brought to standard ship classification records pertaining little demanding that I close my eyes to the shortcomings, and even ships with counterfeit documents. Are given flag of convenience states, and Georgia, Cambodia, Comoros, North Korea and others, whose vessels must be treated with more attention from the NRA inspectors.

The current legal framework for the implementation of Port State Control inspections, must be regarded as sufficient, but must continue to work towards to guide you in whatever manner necessary in every moment.

References:

[2] The Convention then goes on to establish preparatory measures which should be taken, including the establishment of rescue co-ordination centres and subcentres. It outlines operating procedures to be followed in the event of emergencies or alerts and during SAR operations. This includes the designation of an on-scene commander and his duties.
[10] www.imo.org